

Introduced July 5, 2011
Public Hearing July 18, 2011
Council Action July 28, 2011
Executive Action August 1, 2011
Effective Date October 1, 2011

County Council Of Howard County, Maryland

2011 Legislative Session

Legislative Day No. 8

Bill No. 47-2011

Introduced by: The Chairperson at the request of the County Executive

AN ACT, pursuant to the Stormwater Management Act of 2007, amending certain stormwater management regulations in the Howard County Code, amending certain definitions, defining certain term, referring to various stages instead of plans, removing certain alternative compliance, clarifying certain waiver provisions and allowing alternative measures instead of alternative compliance, providing that the Howard County Design Manual shall contain certain provisions, making certain technical corrections, and generally relating to stormwater management requirements in Howard County.

Introduced and read first time July 5, 2011. Ordered posted and hearing scheduled.

By order Stephen M LeGendre
Stephen LeGendre, Administrator

Having been posted and notice of time & place of hearing & title of Bill having been published according to Charter, the Bill was read for a second time at a public hearing on July 18, 2011.

By order Stephen M LeGendre
Stephen LeGendre, Administrator

This Bill was read the third time on July 28, 2011 and Passed ☒. Passed with amendments ☐. Failed ☐.

By order Stephen M LeGendre
Stephen LeGendre, Administrator

Sealed with the County Seal and presented to the County Executive for approval this 29th day of July, 2011 at 2:00 a.m./p.m.

By order Stephen M LeGendre
Stephen LeGendre, Administrator

Approved/Vetoed by the County Executive August 1, 2011

Kep Ulman
Kep Ulman, County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; Underlining indicates material added by amendment.

1 ***Section 1. Be It Enacted by the County Council of Howard County, Maryland, that the***
2 ***Howard County Code is amended as follows:***

3
4 ***By amending:***

5 ***Title 18 – Public Works***

6 ***Section 18.901 “Definitions”***

7
8 ***By amending:***

9 ***Title 18 – Public Works***

10 ***Section 18.902 “Applicability”***

11
12 ***By amending:***

13 ***Title 18 – Public Works***

14 ***Section 18.902A “Requirement to provide stormwater management measures,***
15 ***exemptions”***

16
17 ***By amending:***

18 ***Title 18 – Public Works***

19 ***Section 18.903 “Design criteria; Minimum control requirements; alternatives”***

20
21 ***By amending subsections (a) and (g) of***

22 ***Title 18 – Public Works***

23 ***Section 18.904 “Stormwater Management Measures”***

24
25 ***By amending:***

26 ***Title 18 – Public Works***

27 ***Section 18.905 “Stormwater Management Plans”***

28
29 ***By amending:***

30 ***Title 18 – Public Works***

31 ***Section 18.906 “Grading or Building Permits”***

1

2 *By repealing:*

3 *Title 18 – Public Works*

4 *Section 18.907 “Stormwater Management Alternative Compliance”*

5

6 *By amending:*

7 *Title 18 – Public Works*

8 *Section 18.908 “Stormwater Management Waivers; Watershed Management*
9 *Plans”*

10

11 *By amending:*

12 *Title 18 – Public Works*

13 *Section 18.910 “Redevelopment”*

14

15 *By amending subsection (d) of:*

16 *Title 18 – Public Works*

17 *Section 18.911 “Performance Bond”*

18

19 *By amending:*

20 *Title 18 – Public Works*

21 *Section 18.912 “Inspection”*

22

23 *By amending:*

24 *Title 18 – Public Works*

25 *Section 18.914 “Maintenance”*

26

27 *By repealing and reenacting:*

28 *Title 18 – Public Works*

29 *Section 18.915 “Appeals”*

30

31 *By amending:*

1 *Title 18 – Public Works*
2 *Section 18.916 “Penalties”*

3

4 **Title 18. Public Works.**

5 **Subtitle 9. Stormwater management.**

6

7 **Section 18.901. Definitions.**

8 The following terms have the meanings indicated:

9 (a) *Administration* means the Maryland Department of the Environment (MDE) Water
10 Management Administration (WMA).

11 (b) *Adverse impact* means any deleterious effect on waters or wetlands, including their
12 quality, quantity, surface area, species composition, aesthetics or usefulness for human or
13 natural uses which are or may potentially be harmful or injurious to human health,
14 welfare, safety or property, to biological productivity, diversity or stability, or which
15 unreasonably interfere with the enjoyment of life or property, including outdoor
16 recreation.

17 (c) *Agricultural land management practices* means those methods and procedures used in
18 the cultivation of land in order to further crop and livestock production and conservation
19 of related soil and water resources.

20 (d) *Applicant* means a person, firm, or governmental agency who executes the necessary
21 documentation to procure official approval of a project to carry out construction activities
22 involving stormwater management systems.

23 (e) *Approving agency* means the entity responsible for the review and approval of
24 stormwater management plans. As set forth in the Howard County Design Manual and
25 depending on the nature of the project, the approving agency is the Department of
26 Planning and Zoning or the Department of Public Works.

27 (f) *Best management practice (BMP)* means any structural device or nonstructural
28 practice designed to temporarily store or treat stormwater runoff in order to mitigate
29 flooding, reduce pollution, or provide other amenities.

1 (g) *Channel protection storage volume (cPv)* means the volume used to design structural
2 management practices to control stream channel erosion. Methods for calculating the
3 channel protection storage volume are specified in the 2000 Maryland Stormwater
4 Design Manual.

5 (h) *Clearing* means the removal of trees and brush from the land, but shall not include the
6 ordinary moving of grass.

7 [(i) *Concept plan* means the first of three required plan approvals that includes the
8 information necessary to allow an initial evaluation of a proposed project.]]

9 (I) *CONCEPT STAGE* MEANS THE FIRST STAGE OF THE STORMWATER MANAGEMENT DESIGN
10 PROCESS. APPROVAL OF THE ENVIRONMENTAL CONCEPT PLAN CONSTITUTES THE
11 APPROVAL OF THE CONCEPT STAGE.

12 (j) *County* means Howard County, Maryland.

13 (k) *Design manual* means the 2000 Maryland Stormwater Design Manual, and all
14 subsequent revisions, that serves as the official guide for stormwater management
15 principles, methods, and practices. The 2000 Maryland Stormwater Design Manual may
16 be supplemented by the Howard County Design Manual.

17 (l) *Develop land* means to change the runoff characteristics of a parcel of land or lot in
18 conjunction with residential, commercial, industrial, or institutional construction or
19 alteration.

20 (m) *Drainage area* means an area contributing runoff to a single point measured in a
21 horizontal plane, which is enclosed by a ridge line.

22 (n) *Easement* means a grant or reservation by the owner of land for the use of such land
23 by others for a specific purpose, and which shall be recorded in the land records of
24 Howard County.

25 (O) *ENVIRONMENTAL CONCEPT PLAN* MEANS THE FIRST OF THREE REQUIRED PLAN
26 APPROVALS THAT INCLUDES THE INFORMATION NECESSARY TO ALLOW AN INITIAL
27 EVALUATION OF A PROPOSED PROJECT.

28 . ([([o])P) *Environmental site design (ESD)* means using small-scale stormwater
29 management practices, nonstructural techniques, and better site planning to mimic natural

hydrologic runoff characteristics and minimize the impact of land development on water resources. Methods for designing ESD practices are specified in the design manual.

(((p))Q) *Exemption* means those land development activities that are not subject to the stormwater management requirements of this subtitle.

(((q))R) *Extended detention* means a stormwater design feature that provides gradual release of a volume of water in order to increase settling of pollutants and protect downstream channels from frequent storm events. Methods for designing extended detention BMPs are specified in the design manual.

(((r))S) *Extreme flood volume (Q_f)* means the storage volume required to control those infrequent but large storm events in which the overbank flows reach or exceed the boundaries of the 100-year floodplain.

(T) *FINAL STAGE* MEANS THE THIRD STAGE OF THE STORMWATER MANAGEMENT DESIGN PROCESS. APPROVAL OF THE GRADING PLAN CONSTITUTES THE APPROVAL OF THE FINAL STAGE.

(((s)) *Final stormwater management plan* means the last of a multi-step plan-approval process that includes the information necessary to allow all approvals and permits to be issued by the approving agency.]]

(((t))U) *Flow attenuation* means prolonging the flow time of runoff to reduce the peak discharge.

(((u))V) *Grading* means any act by which soil is cleared, stripped, stockpiled, excavated, scarified, filled, or any combination thereof.

(W) *GRADING PLAN* MEANS THE LAST OF A MULTI-STEP PLAN-APPROVAL PROCESS THAT INCLUDES THE INFORMATION NECESSARY TO ALLOW ALL APPROVALS AND PERMITS TO BE ISSUED BY THE APPROVING AGENCY.

(((v))X) *Impervious area* means any surface that does not allow stormwater to infiltrate into the ground.

(((w))Y) *Infiltration* means the passage or movement of water into the soil surface.

(((x))Z) *Maximum extent practicable (MEP)* means designing stormwater management systems so that all reasonable opportunities for using ESD planning techniques and

treatment practices are exhausted and, only where absolutely necessary, implementing a structural BMP.

([[y]]AA) *Off-site stormwater management* means the design and construction of a facility necessary to control stormwater from one or more properties other than the one on which the stormwater management facility lies.

([[z]]BB) *On-site stormwater management* means the design and construction of a facility necessary to control stormwater from one property within the boundary of the subject property.

([[aa]]CC) *Overbank flood protection volume (Q_p)* means the volume controlled by structural practices to prevent an increase in the frequency of the out of bank flooding by development. Methods for calculating the overbank flood protection volume are specified in the design manual.

([[bb]]DD) *Person* means the Federal Government, the State, any County, Municipal Corporation, or other political subdivision of the State, or any of their units; an individual, receiver, trustee, guardian, executor, administrator, fiduciary, or representative of any kind; or any partnership, firm, association, public or private corporation, or any other entity.

([[cc]]EE) *Planning techniques* means a combination of strategies employed early in project design to reduce the impact from development and to incorporate natural features into a stormwater management plan.

([[dd]]FF) *Private stormwater management facility* means any best management practice which is not to be owned and maintained by the County.

([[ee]]GG) *Recharge volume (RE_v)* means that portion of the water quality volume used to maintain groundwater recharge rates at development sites. Methods for calculating the recharge volume are specified in the design manual.

([[ff]]HH) *Redevelopment* means any construction, alteration, or improvement performed on sites where existing site impervious area exceeds 40 percent and where existing land use is commercial, industrial, institutional, or multifamily.

([[gg]]II) *Retrofitting* means the implementation of ESD practices, the construction of a structural BMP in a previously developed area, the modification of an existing structural

BMP, or the implementation of a nonstructural practice to improve water quality over current conditions.

(([[hh]]jj) *Sediment* means soil or other surficial materials transported or deposited by the action of wind, water, ice, or gravity as a product of erosion.

(([[ii]]kk) *Site* means a tract of land, lot or parcel of land or combination of tracts, lots, or parcels of land, which are in one ownership, or are contiguous and in diverse ownership where development is to be performed as part of a unit, subdivision or project.

(ll) *SITE DEVELOPMENT STAGE* MEANS THE SECOND STAGE OF THE STORMWATER MANAGEMENT DESIGN PROCESS. APPROVAL OF ONE OF THE FOLLOWING PLANS CONSTITUTES THE APPROVAL OF THE SITE DEVELOPMENT STAGE: SKETCH PLAN, PRELIMINARY PLAN, PRELIMINARY EQUIVALENT SKETCH PLAN, FINAL PLAN, OR SITE DEVELOPMENT PLAN AS DEFINED IN SECTION 16.108 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE APPLICABLE PLAN WILL ACT AS THE SECOND OF THREE REQUIRED PLAN APPROVALS THAT INCLUDE THE INFORMATION NECESSARY TO ALLOW A DETAILED EVALUATION OF A PROPOSED PROJECT.

(([[jj]]mm) *Stabilization* means the prevention of soil movement by any of various vegetative or structural means.

[[kk) *Stormwater management alternative compliance* means the modification of the minimum design requirements for specific circumstances such that strict adherence to the requirements would result in an unnecessary hardship and not fulfill the intent of this subtitle.]]

(nn) *STORMWATER MANAGEMENT DESIGN PROCESS* MEANS THE THREE STAGE PROCESS REQUIRED BY MDE FOR THE REVIEW OF STORMWATER MANAGEMENT. THE THREE STAGES INCLUDE CONCEPT, SITE DEVELOPMENT AND FINAL STAGES AS DEFINED HEREIN.

(([[ll]]oo) *Stormwater management system* means natural areas, ESD practices, stormwater management measures, and any other structure through which stormwater flows, infiltrates, or discharges from a site.

[[mm) *Stormwater management plan* means a set of drawings or other documents included as part of a proposal submitted under the subdivision and land development regulations as a prerequisite to obtaining a stormwater management approval and which

1 contain all of the information and specification required by the Department of Public
2 Works and the Department of Planning and Zoning. These drawings or documents may
3 be a part of the roads, storm drain and sediment control documents and/or drawings,
4 including final road construction plans and site development plans.]]

5 [[(nn) *Stormwater management waiver* means the reduction of stormwater management
6 requirements for a specific development on a case-by-case basis.]]

7 ([[oo]]PP) *Stripping* means any activity which removes the vegetative cover including
8 tree removal, clearing, grubbing, and storage or removal of topsoil.

9 (QQ) *WAIVER* MEANS THE REDUCTION OF STORMWATER MANAGEMENT REQUIREMENTS FOR
10 A SPECIFIC DEVELOPMENT ON A CASE-BY-CASE BASIS.

11 ([[pp]]RR) *Watershed* means the total drainage area contributing runoff to a single point.

12 ([[qq]]SS) *Watershed management plan* means a plan developed by the County for the
13 purpose of implementing different stormwater management policies for waivers and
14 redevelopment. A watershed management plan shall contain the items set forth in Section
15 18.908 of this subtitle.

16 ([[rr]]TT) *Water quality volume (WQv)* means the storage needed to capture and treat the
17 runoff from 90 percent of the average annual rainfall at a development site. Methods for
18 calculating the water quality volume are specified in the design manual.

19
20 **Section 18.902. Applicability.**

21 (a) *Definitions.* For purposes of this section only, the following terms have the meanings
22 indicated:

23 (1) *Approval* shall mean a documented action by the County following review
24 to determine and acknowledge the sufficiency of submitted materials to
25 meet the requirements of a specified stage in the development process.
26 Approval shall not mean an acknowledgement by the County that
27 submitted materials have been received for review.

28 (2) *Final project approval* shall mean that the County has approved:

(i) The [[final stormwater management plan]] GRADING PLAN WHICH INCLUDES FINAL STORMWATER AND EROSION AND SEDIMENT CONTROL DESIGN; AND

(ii) [[The final erosion and sediment control plan for the project's stormwater facilities; and

(iii))] If applicable, bond or financing, or both, has been secured based on the final plans for the development.

(3) Preliminary project approval shall mean projects for which [[the following plans that have been reviewed by the subdivision review committee and determined by]] the Department of Planning and Zoning HAS REVIEWED AND DETERMINED THE PROJECT to be technically complete[[:

(i) For projects that are subject to the subdivision process:

a. For major subdivisions, a sketch or preliminary equivalent sketch plan; or

b. For minor subdivisions, a final plan; or

(ii) For projects that are not subject to the subdivision process, a site development plan]].

A plan that has received preliminary project approval shall include the following information:

(i) Number of planned dwelling units or lots and proposed density;

(ii) Proposed size and location of all land uses in the project;

(iii) A plan that identifies:

a. The proposed drainage patterns;

b. Locations of all points of discharge from the site; and

c. The type, location, and size of all stormwater management controls based upon site-specific computations of stormwater management requirements;

- (iv) The proposed alignment, location, and construction type and standard for all proposed roads, access ways, and areas of vehicular travel;
- (v) The general location, size, type, and adequacy of all infrastructure proposed for water and wastewater systems; and
- (vi) Any other information deemed necessary by the County to adequately review the proposal.

(b) *APPLICABILITY.* ~~[[Applicability]]~~ this subtitle shall apply to all development projects, except projects that received preliminary project approval prior to May 4, 2010 are subject to stormwater management regulations in effect at the time of approval provided that:

- (1) Final project approval is received prior to May 4, 2013; and
- (2) Construction is complete prior to May 4, 2017.

Section 18.902A. Requirement to provide stormwater management measures, exemptions.

(a) *Requirement to Provide.* A person shall not develop any land for residential, commercial, industrial, or institutional uses without providing stormwater management measures that control or manage runoff from such developments, except as provided within this subtitle. Stormwater management measures must be designed consistent with the design manual and constructed according to an approved plan for new development or redevelopment.

(b) *Exemptions.* ~~[[A stormwater]]~~ STORMWATER management ~~[[plan]]~~ is not required for:

- (1) Additions or modifications to existing single-family detached residential structures that do not disturb over 5,000 square feet of land area;
- (2) Developments that disturb less than 5,000 square feet of land area;
- (3) Land development activities which are regulated under specific State laws regarding the management of stormwater; or
- (4) Agricultural land management ~~[[activities]]~~ PRACTICES.

Section 18.903. Design criteria; Minimum control requirements; alternatives.

(a) The minimum control requirements established in this section and the design manual are as follows:

- (1) The County shall require that the planning techniques, nonstructural practices, and design methods specified in the design manual be used to implement ESD to the MEP. The use of ESD planning techniques and treatment practices must be exhausted before any structural BMP is implemented. Stormwater management [[plans]] for development projects subject to this subtitle shall be designed using ESD sizing criteria, recharge volume, water quality volume, and channel protection storage volume criteria according to the design manual. The MEP standard is met when channel stability is maintained, predevelopment groundwater recharge is replicated, nonpoint source pollution is minimized, and structural stormwater management practices are used only if determined to be absolutely necessary.
- (2) Control of the two-year and ten-year frequency storm event is required according to the design manual and all subsequent revisions if the County determines that additional stormwater management is necessary because historical flooding problems exist and downstream floodplain development and conveyance system design cannot be controlled.
- (3) The County may require more than the minimum control requirements if:
 - (i) Hydrologic or topographic conditions warrant; or
 - (ii) Flooding, stream channel erosion, or water quality problems exist downstream from a proposed project.

(b) Stormwater management [[plans]] where applicable, shall be consistent with adopted and approved watershed management plans or flood management plans as approved by the Maryland Department of the Environment in accordance with the Flood Hazard Management Act of 1976.

1 **Section 18.904. Stormwater Management Measures.**

2 (a) *Required.* The ESD planning techniques and treatment practices and structural
3 stormwater management measures established in this subtitle and the design manual shall
4 be used, either alone or in combination, in a stormwater management [[plan]] DESIGN. A
5 developer shall demonstrate that ESD has been implemented to the MEP before the use
6 of a structural BMP is considered in developing the stormwater management [[plan]]
7 DESIGN.

8 (g) *Alternatives.* Alternative ESD planning techniques and treatment practices and
9 structural stormwater measures may be used for new development runoff control if they
10 meet the performance criteria established in the design manual and all subsequent
11 revisions. Practices used for redevelopment projects shall be approved by the County.
12 ALL ALTERNATIVE ESD PRACTICES SHALL BE APPROVED BY THE ADMINISTRATION.

13
14 **Section 18.905. Stormwater Management [[Plans]] DESIGN PROCESS.**

15 [[a) *Submission of Stormwater Management Plans.* Except as provided in subsection (c)
16 of this section, for any proposed development, the owner or developer shall submit multi-
17 step stormwater management plans to the County for review and approval as follows:

18 (1) Each plan submittal shall include the minimum content specified in
19 subsection (d) of this section; and

20 (2) The following plans shall be submitted for:

21 (i) Projects subject to the subdivision process:

- 22 a. Environmental concept plan;
- 23 b. Sketch plan (if applicable);
- 24 c. Preliminary plan (if applicable);
- 25 d. Preliminary equivalent sketch (if applicable);
- 26 e. Final plan;
- 27 f. Site development plan (if applicable); and
- 28 g. Grading plan; and

(ii) Projects subject to the site development plan process without the subdivision process:

- a. Environmental concept plan;
- b. Site development plan; and
- c. Grading plan.]]

[[b)] (A) *Review and Approval of Stormwater Management [[Plans]]*. The County shall perform a comprehensive review of the stormwater management [[plans]] for each step of plan review. THE COUNTY SHALL REMOVE DESIGN IMPEDIMENTS FROM THE REVIEW PROCESS THAT PROHIBIT THE IMPLEMENTATION OF ESD TO THE MEP UNLESS INCONSISTENT WITH PUBLIC SAFETY, HEALTH, AND THE PUBLIC WELFARE. Coordinated comments will be provided by the department of planning and zoning for each [[plan step]] DESIGN STAGE that reflects input from all appropriate agencies including, but not limited to, the Soil Conservation District (SCD), the Department of Public Works, and specific divisions within the Department of Planning and Zoning. All comments from the County and other appropriate agencies shall be addressed and approval received at each [[step]] STAGE of the project design before subsequent submissions.

[[c) *Exceptions*. The following plan types are exempt from the submission of the environmental concept plan:

- (1) Building permits with stormwater management plans previously reviewed and approved through another review process (i.e., subdivision or site development plans); and
- (2) Redline revisions that do not require changes to stormwater management.]]

[[d)] (B) *Contents and Submission of Stormwater Management [[Plans]]*. Stormwater management [[plans]] DESIGN shall contain the following:

- (1) [[For sites subject to the subdivision process or site development plan process, the owner or developer shall submit an environmental concept plan]] A CONCEPT STAGE that provides sufficient information for an initial assessment of the proposed project and whether stormwater management

can be provided according to this subtitle. Plans submitted for concept
STAGE approval shall include, but are not limited to:

- (i) A map at a scale specified by the Department of Planning and Zoning showing site location, existing natural features, water and other sensitive resources, topography, and natural drainage patterns;
- (ii) The anticipated location of all proposed impervious areas, buildings, roadways, parking, sidewalks, utilities, and other site improvements;
- (iii) The location of the proposed limit of disturbance, erodible soils, steep slopes, and areas to be protected during construction;
- (iv) Preliminary estimates of stormwater management requirements, the selection and location of ESD practices to be used, and the location of all points of discharge from the site;
- (v) A narrative that supports the concept design and describes how ESD will be implemented to the MEP; and
- (vi) Any other information required by the County.

(2) Following [[environmental]] concept [[plan]] STAGE approval by the County, the owner or developer [[for projects subject to the subdivision plan process shall submit the following]] SHALL SUBMIT PLANS MEETING REQUIREMENTS FOR THE SITE DEVELOPMENT STAGE.

[[(i) Sketch, preliminary, or preliminary equivalent plans that reflect comments received during any previous review phase including review of the environmental concept plan.]] Plans submitted for SITE DEVELOPMENT STAGE approval shall be of sufficient detail to allow the plan to be reviewed and shall include, without limitation, the following items:

[[a.]] (i) All information provided during the [[environmental concept plan review phase]] CONCEPT STAGE;

1 [[b.]](II) [[Subdivision]] SITE layout, exact impervious area
2 locations and acreages, proposed topography, delineated
3 drainage areas at all points of discharge from the site, and
4 stormwater volume computations for ESD practices and
5 quantity control structures;

6 [[c.]] (III) A proposed erosion and sediment control plan that
7 contains the construction sequence, any phasing necessary
8 to limit earth disturbances and impacts to natural resources,
9 and an overlay plan showing the types and locations of
10 ESD and erosion and sediment control practices to be used;

11 [[d.]] (IV) A narrative that supports the [[subdivision]] SITE design,
12 describes how ESD will be used to meet the minimum
13 control requirements, and justifies any proposed structural
14 stormwater management measure; and

15 [[e.]] (V) Any other information required by the County.

16 [[(ii) Except for a minor subdivision which is subject to either the site
17 development plan process or a grading plan, if final road
18 construction plans are required, final road construction plans shall
19 include final erosion and sediment control and stormwater
20 management plans that reflect the comments received during any
21 previous review phases, including review of the environmental
22 concept plan. Plans submitted for final approval shall be of
23 sufficient detail to allow all approvals and permits to be issued
24 according to the following:

- 25 a. Final erosion and sediment control plans shall be
26 submitted according to COMAR 26.17.01.05; and
27 b. Final stormwater management plans shall be submitted for
28 approval in the form of construction drawings and shall be
29 accompanied by a report that includes sufficient

1 information to evaluate the effectiveness of the proposed
2 runoff control design.

3 Inside the planned service area for water and sewer
4 service, with approval of the final road construction plans
5 the owner or developer shall submit the final site
6 development plans for approval by the County.]]

7 (3) Following [[environmental concept plan]] SITE DEVELOPMENT STAGE
8 approval by the County, the owner or developer [[for projects subject to
9 the site development plan process]] shall submit PLANS MEETING
10 REQUIREMENTS FOR FINAL STAGE. [[a site development plan that reflects
11 comments received during any previous review phase including review of
12 the environmental concept plan.]] Plans submitted for FINAL STAGE
13 approval [[shall be of sufficient detail to allow site development to be
14 reviewed and shall include, without limitation, the following items:

- 15 (i) All information provided during the environmental concept plan
16 review phase;
- 17 (ii) Site layout, exact impervious area locations and acreages, proposed
18 topography, delineated drainage areas at all points of discharge
19 from the site, and stormwater volume computations for ESD
20 practices and quantity control structures;
- 21 (iii) A proposed erosion and sediment control plan that contains the
22 construction sequence, any phasing necessary to limit earth
23 disturbances and impacts to natural resources, and an overlay plan
24 showing the types and locations of ESD and erosion and sediment
25 control practices to be used;
- 26 (iv) A narrative that supports the site design, describes how ESD will
27 be used to meet the minimum control requirements, and justifies
28 any proposed structural stormwater management measure; and
- 29 (v) Any other information required by the approving agency.

1 (4) A grading plan is required following the approval of the final plan or site
2 development plan. The grading plan shall include final erosion and
3 sediment control and stormwater management plans that reflect the
4 comments received during any previous review phase including review of
5 the environmental concept plan. Plans submitted for final approval]] shall
6 be of sufficient detail to allow all approvals and permits to be issued
7 according to the following:

- 8 (i) Final erosion and sediment control plans shall be submitted
9 according to COMAR 26.17.01.05; and
10 (ii) Final stormwater management [[plans]] DESIGN shall be submitted
11 for approval in the form of construction drawings and shall be
12 accompanied by a report that includes sufficient information to
13 evaluate the effectiveness of the proposed runoff control design.

14 [[(5)]] (4) Reports submitted for final stormwater management [[plan approval]]
15 DESIGN shall include, but are not limited to:

- 16 (i) Geotechnical investigations including soil maps, borings, site
17 specific recommendations, and any additional information
18 necessary for the final stormwater management design;
19 (ii) Drainage area maps depicting post development runoff flow path
20 and land use;
21 (iii) Hydrologic computations of the applicable ESD and unified sizing
22 criteria according to the design manual for all points of discharge
23 from the site;
24 (iv) Hydraulic and structural computations for all ESD practices and
25 structural stormwater management measures to be used;
26 (v) A narrative that supports the final stormwater management design;
27 and
28 (vi) Any other information required by the County.

29 [[(6)]] (5) Construction drawings submitted for final stormwater management
30 [[plan]] DESIGN approval shall include, but are not limited to:

- (i) A vicinity map;
- (ii) Existing and proposed topography and proposed drainage areas, including areas necessary to determine downstream analysis for proposed stormwater management facilities;
- (iii) Any proposed improvements including location of buildings or other structures, impervious surfaces, storm drainage facilities, and all grading;
- (iv) The location of existing and proposed structures and utilities;
- (v) Any easements and rights-of-way;
- (vi) The delineation, if applicable, of the 100-year floodplain and any on-site wetlands;
- (vii) Structural and construction details including representative cross sections for all components of the proposed drainage system or systems, and stormwater management facilities;
- (viii) All necessary construction specifications;
- (ix) A sequence of construction;
- (x) Data for total site area, disturbed area, new impervious area, and total impervious area;
- (xi) A table showing the ESD and unified sizing criteria volumes required in the design manual;
- (xii) A table of materials to be used for stormwater management facility planting;
- (xiii) All soil boring logs and locations;
- (xiv) An inspection and maintenance schedule;
- (xv) Certification by the owner/developer that all stormwater management construction will be done according to this plan;
- (xvi) An as-built certification signature block to be executed after project completion; and
- (xvii) Any other information required by the County.

1 ~~[[(7)]]~~ (6) If a stormwater management plan involves direction of some or all
2 runoff off of the site, the developer shall obtain from adjacent property
3 owners any easements or other necessary property interests concerning
4 flowage of water.

5 (e) *Preparation of ~~[[Stormwater Management]] Plans AND REPORTS.~~* The design of
6 stormwater management ~~[[plans]]~~ shall be prepared by any individual whose
7 qualifications are acceptable to the County as follows:

8 (1) The County shall require that the design be prepared by either a
9 professional engineer, professional land surveyor, or landscape architect
10 *licensed in the State, as necessary to protect the public or the environment;*
11 and

12 (2) If a stormwater BMP requires either a dam safety permit from the
13 Maryland Department of the Environment or small pond approval from
14 the Howard Soil Conservation District, the County shall require that the
15 design be prepared by a professional engineer licensed in the State.

16
17 **Section 18.906. Grading or Building Permits.**

18 (a) *Permit Requirement.* A grading or building permit may not be issued for any parcel or
19 lot unless final erosion and sediment control and stormwater management ~~[[plans have]]~~
20 DESIGN HAS been approved by the County as meeting all the requirements of the design
21 manual and this Code. Where appropriate, a building permit may not be issued without:

22 (1) Recorded easements for the stormwater management facility and
23 easements to provide adequate access for inspection and maintenance
24 from a public right-of-way;

25 (2) A recorded stormwater management maintenance agreement as described
26 in this subtitle; and

27 (3) A performance bond as described in this subtitle.

28 (b) *Permit Suspension and Revocation.* Any grading or building permit issued by the
29 County may be suspended or revoked after written notice is given to the permittee for any
30 of the following reasons:

- 1 (((i))]1) Any violation of the conditions of the stormwater management [[plan]]
2 DESIGN approval;
3 (((ii))]2) Changes in site runoff characteristics upon which an approval or waiver
4 was granted;
5 (((iii))]3) Construction is not in accordance with the approved plan;
6 (((iv))]4) Noncompliance with any correction notice or stop work order issued for
7 the construction of any stormwater management practice; and
8 (((v))]5) In the opinion of the County, an immediate danger exists in a downstream
9 area.

10 (c) *Permit Conditions.* In granting an approval for any phase of site development, the
11 County may impose such conditions that may be deemed necessary to ensure compliance
12 with the provisions of this subtitle and the preservation of public health, safety, and
13 welfare.

14
15 **Section 18.908. [[Stormwater Management]] Waivers; Watershed Management**
16 **Plans.**

17 (a) *[[Stormwater Management]] Waiver Requests.* A request for a waiver under this
18 section shall:

- 19 (1) Be in writing; and
20 (2) Contain sufficient descriptions, drawings, and any other information that
21 is necessary to demonstrate that ESD has been implemented to the MEP.

22 (b) *Criteria to Grant Waivers.* The approving agency may grant a waiver when it has
23 been demonstrated that ESD has been implemented to the MEP and any grant shall:

- 24 (1) Be on a case-by-case basis;
25 (2) Consider the cumulative effects waivers; and
26 (3) Reasonably ensure the development will not adversely impact stream
27 quality[.] AND ONE OF THE FOLLOWING REQUIREMENTS ARE SATISFIED:
28 (i) OFF-SITE ESD IMPLEMENTATION FOR A DRAINAGE AREA
29 COMPARABLE IN SIZE AND PERCENT OF INCREASED IMPERVIOUSNESS
30 TO THAT OF THE PROJECT;

- (II) WATERSHED STREAM RESTORATION AS APPROVED BY THE APPROVING AGENCY;
- (III) RETROFITTING OF AN EXISTING STORMWATER MANAGEMENT SYSTEM TO MEET OR EXCEED THE CURRENT DESIGN CRITERIA;
- (IV) A FEE IN LIEU, AS ESTABLISHED IN SECTION 18.909 OF THIS SUBTITLE, WHERE PHYSICAL CONSTRAINTS DO NOT ALLOW IMPLEMENTATION OF A MDE APPROVED STORMWATER MANAGEMENT SYSTEM; OR
- (V) OTHER PRACTICES APPROVED BY MDE AND THE COUNTY.

(c) *Quantitative Control Waivers—Requirement to have Watershed Management Plan.*

Except as provided in subsection (e) of this section, the County shall grant stormwater management quantitative control waivers only to those projects within areas where watershed management plans have been developed consistent with this section.

(d) *Watershed Management Plan.* A watershed management plan shall:

- (1) Include detailed hydrologic and hydraulic analyses to determine hydrograph timing;
- (2) Evaluate both quantity and quality management and opportunities for ESD implementation;
- (3) Include a cumulative impact assessment of current and proposed watershed development;
- (4) Identify existing flooding and receiving stream channel conditions;
- (5) Be conducted at a reasonable scale;
- (6) Specify where on-site or off-site quantitative and qualitative stormwater management practices are to be implemented;
- (7) Be consistent with the general performance standards for stormwater management in Maryland found in the design manual; and
- (8) Be approved by the administration.

(e) *Quantitative Control Waivers Without Watershed Management Plans.* If a watershed management plan consistent with this section has not been developed, a stormwater management quantitative control waiver may be granted provided that it has been

1 demonstrated that ESD has been implemented to the MEP when the approving agency
2 determines that circumstances exist that prevent the reasonable implementation of
3 quantity control practices.

4 (f) *Quantitative Control Waiver—Additions, Extensions, or Modifications.* If there are
5 subsequent additions, extensions, or modifications to a development that has received a
6 quantitative control waiver, a separate written waiver request is required that shall
7 comply with subsection (b) of this section.

8 (g) *Qualitative Control Waiver.* A stormwater management qualitative control waiver
9 applies only to:

- 10 (1) In-fill development projects where ESD has been implemented to the MEP
11 and it has been demonstrated that other BMPs are not feasible;
- 12 (2) Redevelopment projects if the approving agency determines that the
13 requirements of this subtitle are satisfied; or
- 14 (3) Sites where the approving agency determines that circumstances exist that
15 prevent the reasonable implementation of ESD to the MEP.

16 (h) [[New development in phased projects with less than 40 percent existing
17 imperviousness, for new development projects with less than 40 percent existing
18 imperviousness, the County may grant a waiver of the requirements of this subtitle for
19 phased projects that have already constructed stormwater management facilities that are
20 designed to meet 2000 regulatory requirements. Reasonable efforts to incorporate ESD
21 shall be demonstrated.]] STORMWATER MANAGEMENT QUANTITATIVE AND QUALITATIVE
22 CONTROL WAIVERS MAY BE GRANTED FOR PHASED DEVELOPMENT PROJECTS IF A SYSTEM
23 DESIGNED TO MEET THE ADMINISTRATION'S 2000 REGULATORY REQUIREMENTS AND
24 HOWARD COUNTY CODE REQUIREMENTS FOR MULTIPLE PHASES, AS SET FORTH IN THIS
25 SUBTITLE, HAS BEEN CONSTRUCTED BY MAY 4, 2010. IF THE 2009 REGULATORY
26 REQUIREMENTS CANNOT BE MET FOR FUTURE PHASES CONSTRUCTED AFTER MAY 4, 2010,
27 ALL REASONABLE EFFORTS TO INCORPORATE ESD IN FUTURE PHASES MUST BE
28 DEMONSTRATED.

29
30 **Section 18.910. Redevelopment.**

1 (a) Stormwater management ~~[[plans]]~~ DESIGN for redevelopment shall be consistent with
2 the design manual.

3 (b) All redevelopment projects shall reduce existing impervious area within the limit of
4 disturbance by at least 50 percent. Where site conditions prevent the reduction of
5 impervious area, then ESD practices shall be implemented to provide qualitative control
6 for at least 50 percent of the site's impervious area. When a combination of impervious
7 area reduction and stormwater management practice implementation is used, the
8 combined reduction shall equal or exceed 50 percent of the existing impervious area
9 within the limit of disturbance.

10 ~~[[~~(c) If the County determines that water quality treatment requirements of this section
11 for redevelopment projects cannot be met, the County may approve other options
12 including, without limitation:

- 13 (1) On-site structural BMPs;
- 14 (2) Off-site BMP implementation for a drainage area comparable in size and
15 percent imperviousness to that of the project;
- 16 (3) Watershed or stream restoration;
- 17 (4) Retrofitting;
- 18 (5) Pollution trading with another entity;
- 19 (6) Watershed management plans;
- 20 (7) Payment of a fee-in-lieu;
- 21 (8) A partial waiver of the treatment requirement to the extent that ESD is not
22 practicable; or
- 23 (9) Other practices approved by the County.]]

24 (C) ALTERNATIVE STORMWATER MANAGEMENT MEASURES MAY BE USED TO MEET THE
25 REQUIREMENTS IN SUBSECTION (B) OF THIS SECTION IF THE OWNER OR DEVELOPER
26 SATISFACTORILY DEMONSTRATES TO THE COUNTY THAT IMPERVIOUS AREA REDUCTION
27 HAS BEEN MAXIMIZED AND ESD HAS BEEN IMPLEMENTED TO THE MEP. ALTERNATIVE
28 STORMWATER MANAGEMENT MEASURES INCLUDE, BUT ARE NOT LIMITED TO:

- 29 (1) AN ON-SITE STRUCTURAL BMP;

1 (2) AN OFF-SITE STRUCTURAL BMP TO PROVIDE WATER QUALITY TREATMENT
2 FOR AN AREA EQUAL TO OR GREATER THAN 50 PERCENT OF THE EXISTING
3 IMPERVIOUS AREA; OR

4 (3) A COMBINATION OF IMPERVIOUS AREA REDUCTION, ESD IMPLEMENTATION,
5 AND AN ON-SITE OR OFF-SITE STRUCTURAL BMP FOR AN AREA EQUAL TO OR
6 GREATER THAN 50 PERCENT OF THE EXISTING SITE IMPERVIOUS AREA
7 WITHIN THE LIMIT OF DISTURBANCE.

8 (D) THE COUNTY MAY DEVELOP SEPARATE POLICIES FOR PROVIDING WATER QUALITY
9 TREATMENT FOR REDEVELOPMENT PROJECTS IF THE REQUIREMENTS OF SUBSECTIONS (B)
10 AND (C) OF THIS SECTION CANNOT BE MET. ANY SEPARATE REDEVELOPMENT POLICY SHALL
11 BE REVIEWED AND APPROVED BY THE ADMINISTRATION AND MAY INCLUDE, BUT NOT BE
12 LIMITED TO:

- 13 (1) A COMBINATION OF ESD AND AN ON-SITE OR OFF-SITE STRUCTURAL BMP;
14 (2) RETROFITTING INCLUDING EXISTING BMP UPGRADES, FILTERING
15 PRACTICES, AND OFF-SITE ESD IMPLEMENTATION;
16 (3) PARTICIPATION IN A STREAM RESTORATION PROJECT;
17 (4) POLLUTION TRADING WITH ANOTHER ENTITY;
18 (5) PAYMENT OF A FEE-IN-LIEU; OR
19 (6) A PARTIAL WAIVER OF THE TREATMENT REQUIREMENTS IF ESD IS NOT
20 PRACTICABLE

21

22 **Section 18.911. Performance Bond.**

23 (d) *Release.* The bond shall not be fully released without a final inspection of the
24 completed work by the County, submission of "as-built" plans, and certification of
25 completion by the County that all stormwater management facilities comply with the
26 approved plan and the provisions of this Code. At the County's discretion, a procedure
27 may be used to release parts of the bond held by the County after various stages of
28 construction have been completed and accepted by the County. The procedures used for
29 partially releasing performance bonds must be specified by the county in writing prior to
30 stormwater management [[plan]] DESIGN approval.

31

1 **18.912. Inspection.**

2 (a) *Inspection During Construction.* The County shall make regular inspections at various
3 stages of construction as provided in Chapter 5, stormwater management, of Volume I
4 (Storm Drainage) of the Howard County Design Manual. Inspections shall be
5 documented in writing by the County.

6 [[(b) *Periodic Inspection.* The Department of Public Works shall ensure that preventative
7 maintenance is performed by inspecting all ESD and best management practices in
8 accordance with the maintenance agreement.

9 (c) *Inspection Access.* The property owner or developer shall construct and maintain all
10 best management practices in a manner such as not to hinder, impede, or restrict the
11 Department of Public Works from making necessary inspections, visual observations,
12 measurements, or from performing tests.

13 (d) *Enforcement.* When a deficiency is discovered during an inspection, construction, or
14 periodic maintenance inspection, the County may:

- 15 (1) Issue a notice of violation specifying the deficiency, the corrective action
16 needed, and the time by which the corrective action must be completed;
17 (2) Issue a stop work order for all site work;
18 (3) Withhold bonds or securities;
19 (4) Impose civil or criminal penalties pursuant to section 18.916 of this
20 subtitle; or
21 (5) Take any of the actions set forth in this section at any time.]]

22
23 **Section 18.914. Maintenance.**

24 THE COUNTY OR PROPERTY OWNER OR BOTH THE COUNTY AND THE PROPERTY OWNER,
25 SHALL PERFORM PERIODIC MAINTENANCE AS REQUIRED IN CHAPTER 5, STORMWATER
26 MANAGEMENT, OF VOLUME I (STORM DRAINAGE) OF THE HOWARD COUNTY DESIGN
27 MANUAL.

28 [[(a) *Responsibility for Maintenance.* The owners of property containing private, public,
29 or both public and private stormwater management facilities shall be responsible for
30 maintenance of those facilities. In cases where there is joint maintenance provided by the

1 County and the property owner or home owners association, the County shall be
2 responsible for structural maintenance only as specified on the plans and in the developer
3 agreement for the specific facilities.

4 *(b) Enforcement of Maintenance Requirement.*

5 (1) When the County determines that deficiencies exist in a private
6 stormwater management system, the County shall notify the property
7 owner in writing of the deficiencies, describe the required corrective
8 action, and the time period to have the deficiencies corrected.

9 (2) If the property owner fails to correct the deficiencies within the specified
10 time frame, the County may apply to the appropriate court for an order
11 allowing the County to enter the property and to make, at the property
12 owner's expense, the necessary repairs or corrections to the system.

13 (3) Following entry of the order and completion of corrective action, the
14 County shall send to the property owner a bill for the costs to correct the
15 deficiencies. If the bill is not paid within 30 days, the County may file
16 with the court a verified statement of costs, for the purpose of entering a
17 civil judgment in the County's favor against the property owner.

18 *(c) Maintenance Agreement.* Whenever a stormwater management plan is required for
19 property pursuant to this subtitle, no grading or building permit shall be issued until the
20 owner of the private stormwater management system executes a maintenance agreement
21 to be recorded in the land records of Howard County and binding upon all subsequent
22 owners of the property, providing that:

23 (1) The property owner shall maintain all stormwater management systems in
24 accordance with the operation and maintenance schedule.

25 (2) The property owner shall permit the County to inspect the stormwater
26 management systems at any time.

27 (3) The property owner shall correct any deficiencies in the system.

28 (4) If the property owner fails to correct deficiencies within 30 days of
29 notification or fails to provide proof of intent to make corrections, the
30 property owner will permit the Department of Public Works upon the

1 property to correct the deficiencies and, within 30 days of the billing, will
2 pay the costs of correction and any administrative costs.]]
3

4 **SECTION 18.915. APPEALS.**

5 ANY PERSON AGGRIEVED BY ANY FINAL DECISION MADE BY THE OFFICIAL CHARGED WITH THE
6 ENFORCEMENT OF THIS SUBTITLE MAY APPEAL THE ACTION TO THE BOARD OF APPEALS. THE
7 APPEAL SHALL BE FILED IN WRITING WITHIN 30 DAYS OF THE DATE OF OFFICIAL TRANSMITTAL OF
8 THE FINAL DECISION OR DETERMINATION TO THE APPLICANT, STATE CLEARLY THE GROUNDS ON
9 WHICH THE APPEAL IS BASED, AND BE PROCESSED IN THE MANNER PRESCRIBED FOR HEARING
10 ADMINISTRATIVE APPEALS IN HOWARD COUNTY.
11

12 **SECTION 18.916. PENALTIES.**

13 (a) *Criminal Penalties.* Any person convicted of violating a provision of this subtitle is guilty
14 of a misdemeanor and upon conviction is subject to a fine [[not exceeding \$900.00 or
15 imprisonment not exceeding five months or both]] OF NOT MORE THAN FIVE THOUSAND
16 DOLLARS (\$5,000.00) OR IMPRISONMENT NOT EXCEEDING 1 YEAR OR BOTH FOR EACH
17 VIOLATION WITH COSTS IMPOSED IN THE DISCRETION OF THE COURT AND NOT TO EXCEED FIFTY
18 THOUSAND DOLLARS (\$50,000.00). Each day that the violation continues is a separate
19 offense.

20 (b) *Civil Penalties.* Alternatively or in addition to and concurrent with other remedies at law
21 or equity, the Department of Public Works may enforce the provisions of this subtitle with
22 civil penalties pursuant to the provisions of title 24, "Civil Penalties," of the Howard County
23 Code. A violation of this subtitle is a Class A offense. Each day that a violation continues is a
24 separate offense.

25 (c) *Injunctive and Other Relief.* In addition, [[Howard]] THE County may institute injunctive,
26 mandamus or other appropriate legal action or proceedings for the enforcement of OR TO
27 CORRECTION VIOLATIONS OF this subtitle. Any court of competent jurisdiction may issue
28 TEMPORARY OR PERMANENT restraining orders, [[temporary or permanent injunctions or
29 mandamus or other appropriate forms of remedy or relief]] INJUNCTIONS OR MANDAMUS, OR
30 OTHER APPROPRIATE FORMS OF RELIEF.
31

1 ***Section 2. And Be It Further Enacted by the County Council of Howard County,***
2 ***Maryland, that this Act shall become effective 61 days after its enactment.***

BY THE COUNCIL

This Bill, having been approved by the Executive and returned to the Council, stands enacted on August 1, 2011.

Stephen M. LeGendre
Stephen M. LeGendre, Administrator to the County Council

BY THE COUNCIL

This Bill, having been passed by the yeas and nays of two-thirds of the members of the Council notwithstanding the objections of the Executive, stands enacted on _____, 2011.

Stephen M. LeGendre, Administrator to the County Council

BY THE COUNCIL

This Bill, having received neither the approval nor the disapproval of the Executive within ten days of its presentation, stands enacted on _____, 2011.

Stephen M. LeGendre, Administrator to the County Council

BY THE COUNCIL

This Bill, not having been considered on final reading within the time required by Charter, stands failed for want of consideration on _____, 2011.

Stephen M. LeGendre, Administrator to the County Council

BY THE COUNCIL

This Bill, having been disapproved by the Executive and having failed on passage upon consideration by the Council stands failed on _____, 2011.

Stephen M. LeGendre, Administrator to the County Council

BY THE COUNCIL

This Bill, the withdrawal of which received a vote of two-thirds (2/3) of the members of the Council, is withdrawn from further consideration on _____, 2011.

Stephen M. LeGendre, Administrator to the County Council